**AUTOMATED WHITE BOX UNIT TESTING DOCUMENTATION ON**

**SIMPLE BANKING ALGORITHM**



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**SOURCE CODE**

[wahyurh/Automated-WhiteBox-Unit-Test: This repository contain automated unittest on simple banking algorithm. - https://github.com/wahyurh/Automated-WhiteBox-Unit-Test](https://github.com/wahyurh/Automated-WhiteBox-Unit-Test)

**OVERVIEW**

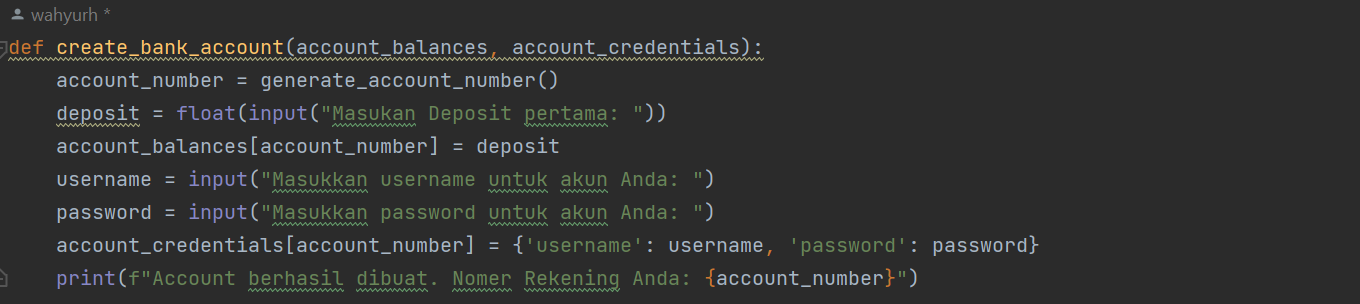
The code above is a simple banking program with basic functionalities such as creating a bank account, log in, deposit money, withdraw money, check account balance, and transferring money between accounts. There are 8 functions in this code :

1. Generate\_account\_number function

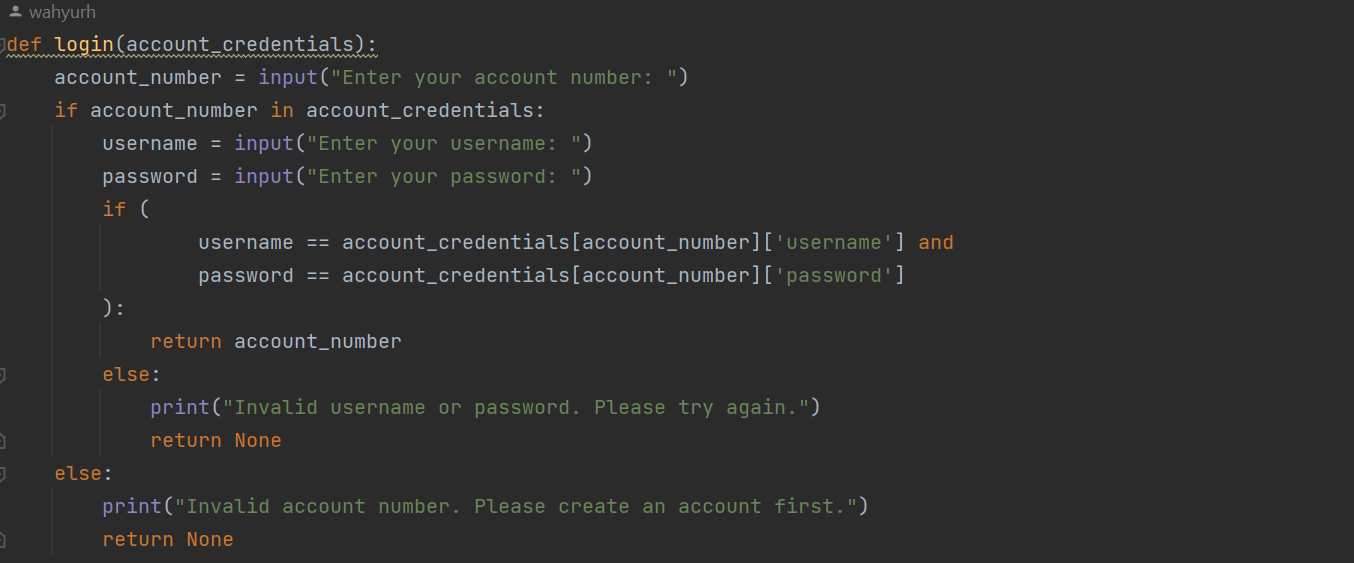


This function used to generate random 5 digits integer number for account number. This function doesn’t take a parameter so every time it called this function only generate random 5 digits number and convert the output into string.

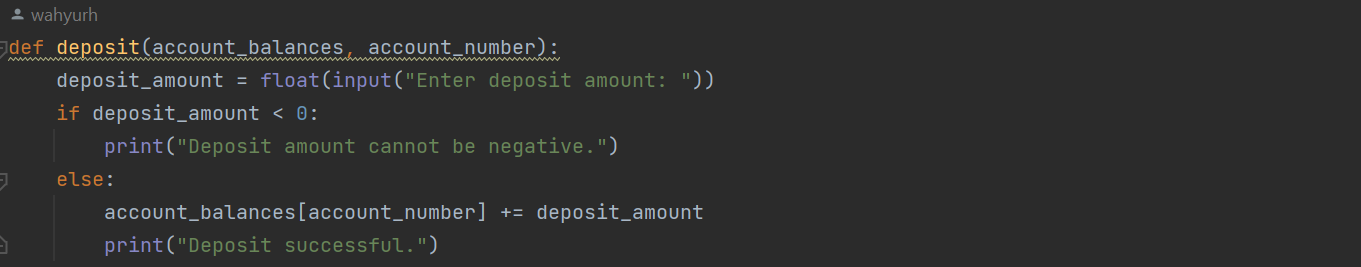
1. Create\_bank\_account function

This function is responsible for creating a new bank account by generating a unique account number. There are two parameters used in this function (account\_balances and account\_credentials). This function first called generate\_account\_number function to create unique number as new bank account number. Then it take user input (number) to

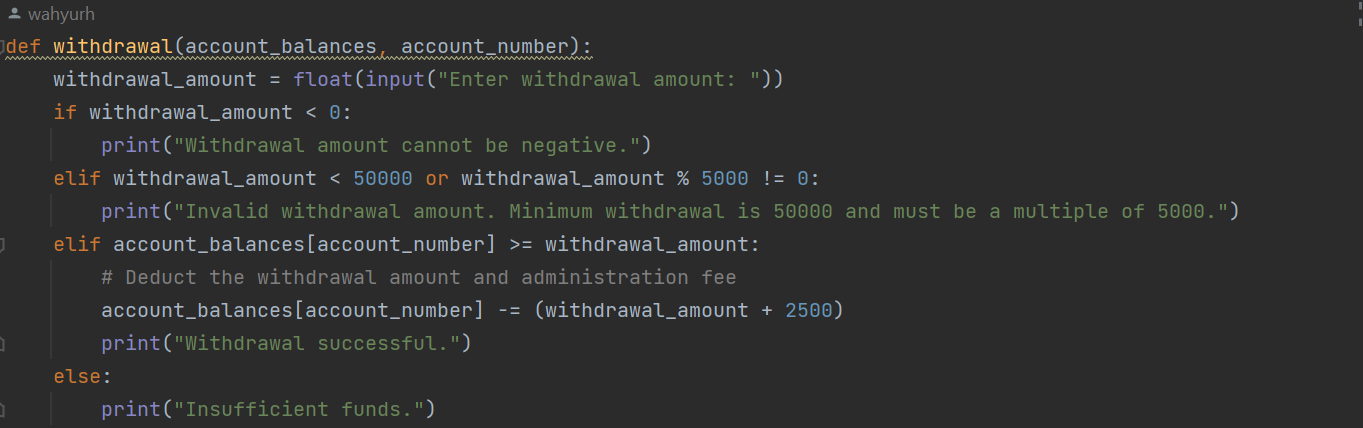
1. Login function



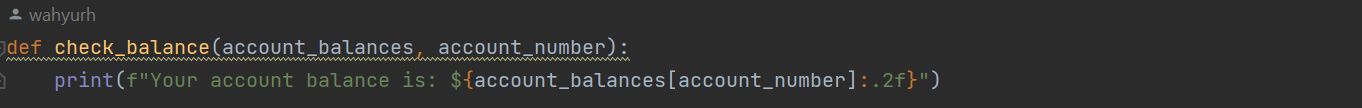
1. Deposit function



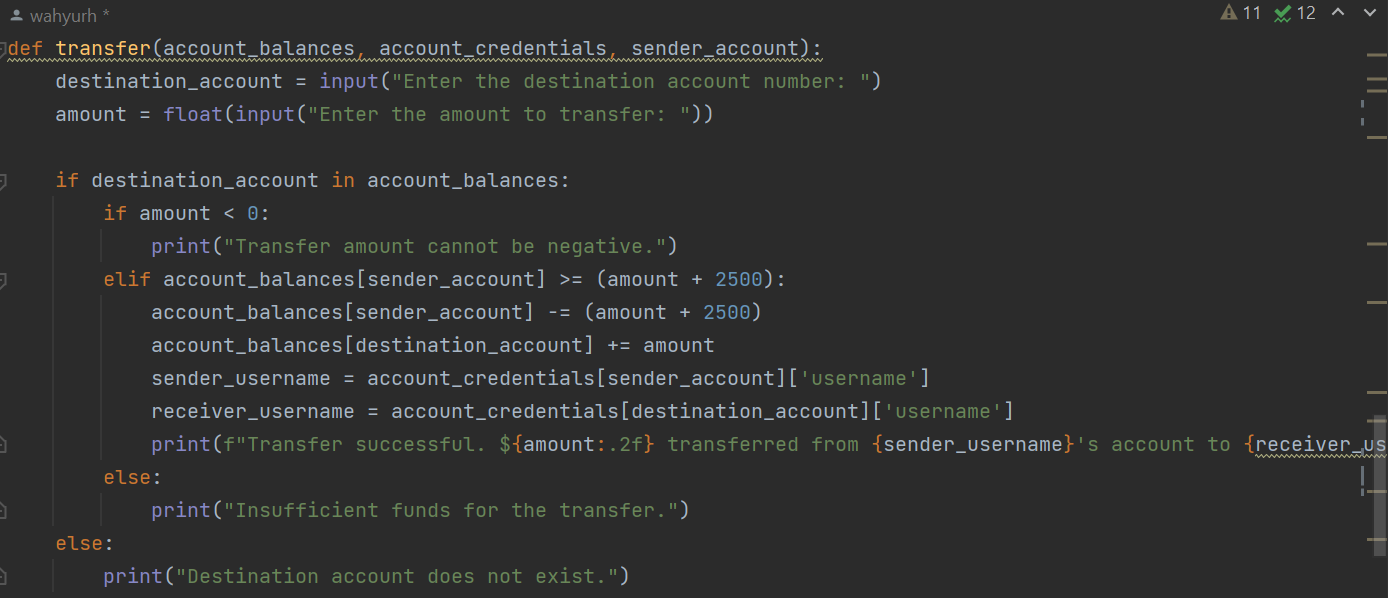
1. Withdrawal function



1. Check\_balance function



1. Transfer function



1. Main function
2. def main():  
    # Open the shelf files for persistent storage  
    with shelve.open("bank\_accounts") as account\_balances, shelve.open("account\_credentials") as account\_credentials:  
    print("\nBanking Menu:")  
    print("1. Create Bank Account")  
    print("2. Login")  
    print("3. Exit")  
    choice = input("Enter your choice (1-3): ")  
    if choice == '1':  
    create\_bank\_account(account\_balances, account\_credentials)  
    elif choice == '2':  
    account\_number = login(account\_credentials)  
    if account\_number is not None:  
    print("\nBanking Options:")  
    print("1. Deposit")  
    print("2. Withdrawal")  
    print("3. Check Account Balance")  
    print("4. Transfer")  
    banking\_choice = input("Enter your choice (1-4): ")  
    if banking\_choice == '1':  
    deposit(account\_balances, account\_number)  
    elif banking\_choice == '2':  
    withdrawal(account\_balances, account\_number)  
    elif banking\_choice == '3':  
    check\_balance(account\_balances, account\_number)  
    elif banking\_choice == '4':  
    transfer(account\_balances, account\_credentials, account\_number)  
    else:  
    print("Invalid choice. Please enter a number between 1 and 4.")  
    elif choice == '3':  
    print("Exiting the banking program. Goodbye!")